Listing of Claims:

1. (Currently Amended) A ~~device arrangement structure for~~ hybrid power system for driving a hydraulic pump in construction equipment, in which ~~a hydraulic pump is driven with use of an engine and a generator motor in combination, and~~ an inflow of discharge oil ~~of said~~ from the hydraulic pump to hydraulic actuators is controlled to drive at least one working machine, said power system comprising:

an engine for driving the hydraulic pump, ~~wherein~~ said hydraulic pump ~~is~~ being connected to said engine via a first power take-off; ~~and~~

~~wherein it~~ a regenerative motor which is directly driven by return oil from said hydraulic actuators, and which regenerates at least one of inertia energy ~~or~~ and potential energy of said working machine to drive said hydraulic pump; and ~~, ii) said~~

a generator motor for driving the hydraulic pump in combination with the engine, ~~which is~~ said generator motor being driven as a generator ~~with~~ by surplus torque when a regeneration torque of said regenerative motor is larger than a driving torque of said hydraulic pump, and said generator motor being ~~is driven~~ drivable as an electric motor to assist with ~~drive~~ driving of said hydraulic pump; [[,]]

wherein the regenerative motor and the generator motor ~~are~~ provided in parallel with said hydraulic pump via said first power take-off.

2. (Currently Amended) A ~~device arrangement structure for~~ hybrid power system for construction equipment in which a hydraulic pump is driven ~~with use of~~ by an engine and a generator motor in combination, and in which an inflow of discharge oil ~~of said~~ from the hydraulic pump to hydraulic actuators is controlled to drive at least one working machine, said system comprising:

(i) devices of a high pressure hydraulic system including:

~~i)~~ said hydraulic pump connected to said engine via a first power take-off,

~~ii)~~ a hydraulic valve for controlling ~~an~~ the inflow of ~~discharge~~ the oil to said hydraulic actuators,

~~iii)~~ a regenerative motor which is connected to said hydraulic pump via said first power take-off, which is driven by return oil from said hydraulic actuators, and which regenerates at least one of inertia energy ~~or~~ and potential energy of said working machine to drive said hydraulic pump, and

~~iv)~~ a working fluid tank for draining the return oil from said hydraulic actuators via said regenerative motor, and

~~wherein~~ (ii) devices of a charging system including:

~~a)~~ said generator motor which is driven as a generator with by surplus torque when a regeneration torque of said regenerative motor is larger than a driving torque of said hydraulic pump, and which is ~~driven~~ drivable as an electric motor to assist with ~~drive~~ driving of said hydraulic pump,

~~b)~~ a capacitor device which is charged ~~with~~ by generation electric power ~~of~~ produced by said generator motor ~~as the generator~~ when the generator motor is driven as a generator, and which supplies driving electric power ~~as~~ to the electric motor, and

~~c)~~ an inverter which controls ~~charge~~ charging of ~~said generator motor into~~ said capacitor device by the generator motor, and ~~drive~~ driving of said generator motor ~~as the electric motor~~ by the capacitor device,

wherein said devices of the charging system are placed separately from said devices of the high pressure hydraulic system.

3. (Currently Amended) The ~~device arrangement structure for the hybrid construction equipment~~ system according to Claim 2, wherein said inverter is placed at an upstream side of a fan driven by said engine; and

wherein said generator motor is connected to said engine [[,]] at a side ~~near~~ of said engine nearer to said inverter.

4. (Currently Amended) The ~~device arrangement structure for the hybrid construction equipment~~ system according to Claim 2, wherein said inverter is placed at an upstream side of a suction ~~type~~ fan driven by said engine; and

wherein said generator motor is connected to said engine via a second power take-off ~~provided at said engine,~~ at a side ~~near to~~ of said engine nearer to said fan.

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☒ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.
As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.